



General information	
Academic subject	Laboratory of Petrography
Degree course	Bachelor's degree L/32
Academic Year	2 year
European Credit Transfer and Accumulation System (ECTS)	2
Language	Italian
Academic calendar (starting and ending date)	1 March 2022- 15 June 2022
Attendance	yes

Professor/ Lecturer	
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Department and address	Earth and geo-environmental science department via E. Orabona, 4 Bari
Virtual headquarters	Earth and geo-environmental science department via E. Orabona, 4 Bari
Tutoring (time and day)	Monday and Thursday 11-13, room 33 third floor of Earth Science palace Campus Bari

Syllabus	
Learning Objectives	Observations of macroscopic samples of magmatic, sedimentary and metamorphic rocks (effusive, intrusive and pyroclastic).
Course prerequisites	Mathematics, physic, chemistry, mineralogy
Contents	The main objectives of the course are to provide the principles of magmatism, sedimentary process and metamorphism, and to provide the basis for the recognition and classification of igneous, sedimentary and metamorphic rocks using textural and mineralogical parameters at the macroscopic scale on hand samples. Observations of some minerals under optical microscopy.
Books and bibliography	Winter –An introduction igneous and metamorphic petrology. Prentice Hall D'Argenio, Innocenti, Sassi, - Introduzione allo studio delle rocce (Utet) Cornelis Klein Anthony R. Philpotts Mineralogia e Petrografia. Zanichelli
Additional materials	Slides of teacher, lecture notes.

Work schedule			
Total	Lectures	Hands on (Laboratory, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
50	0	30	20
ECTS			
2		2	
Teaching strategy		Description of hand samples and group work	
Expected learning outcomes			
Knowledge and understanding on:		<ul style="list-style-type: none">○ Observations of macroscopic samples of magmatic, sedimentary and metamorphic rocks (effusive, intrusive and pyroclastic).○ Ability to recognize the structural and mineralogical features of the rocks	



	<p>for a correct classification.</p> <ul style="list-style-type: none"> ○ The achievement of this goal is promoted during the exercises in the laboratory. ○ exercises in the laboratory on the hand samples and under optical microscope
Applying knowledge and understanding on:	<ul style="list-style-type: none"> ○ Ability to understand the geological environment in which different rock types are formed. ○ Recognition of macroscopic rock samples. ○ This ability is promoted through continuous talks during the laboratory activities.
Soft skills	<ul style="list-style-type: none"> • <i>Making informed judgments and choices</i> <ul style="list-style-type: none"> ○ The students acquire the scientific method in the study of environment. ○ Development of scientific procedures and judgements during the lectures. ○ Petrographic features of the rock types ○ Observation of hand samples • <i>Communicating knowledge and understanding</i> <ul style="list-style-type: none"> ○ Acquisition of the specific and technical language of Petrography ○ Ability to organize a scientific talk even with digital support. • <i>Capacities to continue learning</i> <ul style="list-style-type: none"> ○ Ability to understand English scientific works. The students develop the capacities to select the fundamental concepts of petrography and make connections with other geological disciplines. The capacities to continue learning is actuated during the laboratory activities.

Assessment and feedback	
Methods of assessment	Oral evaluation starting from the observation of macroscopic samples of rocks. The evaluation of this module is strongly integrated with that of the Petrography teaching.
Evaluation criteria	<ul style="list-style-type: none"> • <i>Knowledge and understanding</i> <ul style="list-style-type: none"> ○ Recognize hand samples of the main lithologies. • <i>Applying knowledge and understanding</i> <ul style="list-style-type: none"> ○ Petrographic descriptions (rock descriptions) of metamorphic, sedimentary and igneous rocks through the hand specimen. • <i>Autonomy of judgment</i> <ul style="list-style-type: none"> ○ The students should be able to apply their observations to interpret the formation of igneous, sedimentary and metamorphic rocks. • <i>Communicating knowledge and understanding</i> <ul style="list-style-type: none"> ○ ability to make connections between concepts studied • <i>Communication skills</i> <ul style="list-style-type: none"> ○ Language propriety • <i>Capacities to continue learning</i> <ul style="list-style-type: none"> ○ Critical ability
Criteria for assessment and attribution of the final mark	The highest grade is achieved by showing reasoning skills and appropriate scientific language. The evaluation will be negative if the student shows that he learned the notions using wrong terms.
Additional information	